

SURREBUTTAL TESTIMONY OF GERALD C. HARTMAN, P.E., BCEE, ASA

1 Q. Are you the same Gerald C. Hartman that has pre-filed direct
2 testimony in this case?

3 A. Yes, I am.

4 Q. What is the purpose of your surrebuttal testimony in this
5 proceeding, Mr. Hartman?

6 A. The purpose of my surrebuttal testimony is to respond, on behalf of
7 the City of Tega Cay, to certain aspects of the testimony and exhibits
8 pre-filed by the Office of Regulatory Staff, or ORS, as well as certain
9 aspects of the rebuttal testimony and discovery responses filed by Tega
10 Cay Water Service, Inc., or TCWS.

11 Q. Mr. Hartman, have you reviewed the pre-filed testimony of Christina
12 Stutz on behalf of ORS in this matter?

13 A. Yes, I have reviewed her testimony and the Audit Department Report
14 she attached to her testimony.

15 Q. Are there any adjustments detailed in Ms. Stutz's testimony and the
16 ORS Audit Report with which you agree?

17 A. Yes. I have incorporated a number of her audit adjustments in
18 Surrebuttal Exhibit GCH-1, specifically Schedule 1 and Schedule 2. The
19 net effect of her audit adjustments with which I agree are shown in the
20 Other Adjustments Column and I have included references to the specific
21 adjustments from her Audit Exhibit CAS-4. The net effect of each of her
22 adjustments was calculated by taking her audit adjustment less the TCWS
23 adjustment as filed, to arrive at the number included in the other column
24 on Schedules 1 and 2 of Surrebuttal Exhibit GCH-1.

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1 Q. Mr. Hartman, have you reviewed the pre-filed testimony of Dr.
2 Douglas H. Carlisle on behalf of ORS in this matter?

3 A. Yes, I have reviewed his testimony and exhibits attached to his
4 testimony.

5 Q. Do you have any comments relative to Dr. Carlisle's recommendations
6 for Return on Equity and overall Rate of Return?

7 A. Yes. While I have no significant disagreement with his methodology
8 used to calculate the Return on Equity and Overall Rate of Return, I
9 referenced the methodology used by the Florida Public Service Commission
10 in my pre-filed direct testimony as a maximum. I have, however,
11 calculated the impact of his recommended 7.99% overall Rate of Return, and
12 will discuss that amount in the summary of this surrebuttal testimony.

13 Q. Mr. Hartman, have you reviewed the rebuttal testimony of Bruce T.
14 Haas on behalf of TCWS in this matter?

15 A. Yes, I have reviewed his rebuttal testimony and exhibits attached to
16 his rebuttal testimony.

17 Q. Do you have any comments relative to Mr. Haas's rebuttal of your
18 excessive water loss adjustment in your pre-filed direct testimony?

19 A. Yes. Beginning on the bottom of Page 7 of Mr. Haas's rebuttal
20 testimony, he talks about the Bulk Water Contract with York County and the
21 fact that TCWS pays only for the water that is actually sold by TCWS to
22 the customers unless the amount of non-account water reaches the total
23 which is derived by multiplying the water usage registered at customer
24 meters by 115%. Mr. Haas further states that since TCWS began receiving
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1 bulk service from York County, no additional charges have been imposed.
2 As stated in my pre-filed direct testimony, I would consider any non-
3 account water over 10% to be excessive. If TCWS only paid York County for
4 the same amount of gallons as it charged to its customers, then there
5 would be no adjustment to the operating expenses required, but TCWS has
6 not furnished adequate data in response to City's discovery requests for
7 the City to know whether TCWS just paid only for water used by its
8 customers. I reserve my right to reconsider this adjustment upon receipt
9 of any further data from TCWS or ORS.

10 **Q. Do you have any comments relative to Mr. Haas's rebuttal of your**
11 **inflow and infiltration (I/I) adjustment in your pre-filed direct**
12 **testimony?**

13 A. Yes. On page 11 of Mr. Haas's rebuttal testimony, he discusses the
14 fact that the I&I percentage I relied upon was based upon a study
15 conducted over 10 years ago at a time that the City of Tega Cay was
16 interested in purchasing the system. I take exception to Mr. Haas's
17 contention that the I&I was overstated in my previous study in an effort
18 to devalue the system in favor of the City for which I performed the
19 valuation. The I&I percentage calculated for that Study was not rebutted,
20 nor has Mr. Haas provided competent, substantial evidence to do so. Mr.
21 Haas discusses maintenance programs that theoretically would address
22 issues with I&I, but does not offer a current I&I percentage lower than
23 that shown in my pre-filed direct testimony. As a matter of fact, TCWS in
24 its response to City's first set of interrogatories and request for
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1 production of documents dated June 7, 2010, in which TCWS was specifically
2 asked for current I&I percentages experienced, responded that "TCWS is not
3 in possession of information responsive to this request". The calculation
4 of I&I is fairly standard and I find it perplexing that TCWS did not
5 perform this calculation if the I&I percentage they are experiencing is
6 significantly lower than that shown in my pre-filed direct testimony and
7 could be used to rebut my calculated percentages. Mr. Haas's failure to
8 directly rebut my I&I calculation is indicative of a continued problem
9 with I&I in the TCWS collection system resulting in excessive I&I. Since
10 TCWS was unable to provide data which would allow a calculation of I&I
11 lower than that included in my pre-filed direct testimony, I made no
12 changes to my previous adjustments.

13 **Q. Mr. Hartman, have you reviewed the rebuttal testimony of Steve**
14 **Lubertozzi on behalf of TCWS in this matter?**

15 A. Yes, I have reviewed his rebuttal testimony and exhibits attached to
16 his rebuttal testimony.

17 **Q. Do you have any comments on his rebuttal testimony?**

18 A. Yes. To the extent that Mr. Lubertozzi's revised service revenue
19 increase differs from that shown in my Surrebuttal Exhibit GCH-1, I would
20 propose my service revenue numbers.

21 **Q. Would you summarize your position regarding the TCWS rate filing?**

22 A. Yes. Based on my review of certain aspects of the testimony and
23 exhibits pre-filed by ORS as well as certain aspects of the rebuttal
24 testimony and exhibits filed by TCWS, I have updated my overall revenue
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1 recommendation for TCWS as follows:

2 The combined recommendation of the City of Tega Cay produces a revenue
3 requirement decrease for water operations of \$14,482 and a revenue
4 requirement decrease for sewer operations of \$117,304 from the total Test
5 Year service revenues originally proposed by TCWS; Return on Rate Base
6 decrease of 0.61% for water and 0.62% for sewer; and net income decrease
7 of \$2,405 for water and \$16,018 for sewer, as summarized on Surrebuttal
8 Exhibit GCH-1, Schedule 11. Therefore, based on my adjustments, the
9 proposed increase to service revenues for water is \$64,908 and for sewer
10 is \$42,308 resulting in Total Service Revenue Requirements for water of
11 \$427,572 and for sewer of \$782,171. These calculations are based on my
12 proposed maximum overall rate of return of 8.36% as discussed previously.

13 **Q. Have you calculated the effect on the overall service revenue**
14 **increase based on Dr. Carlisle's proposed overall Rate of Return of 7.99%?**

15 A. Yes. I have prepared these calculations for illustrative purposes
16 only, as Dr. Carlisle's proposed overall rate of return of 7.99% meets the
17 criteria of being below the maximum of 8.36% I have calculated based on
18 the FPSC leverage formula in my pre-filed direct testimony. Based on an
19 overall rate of return of 7.99% and my adjustments as previously discussed
20 in this surrebuttal testimony and my pre-filed direct testimony, the
21 resulting increase to service revenue for water is \$62,586 and for sewer
22 is \$27,083 resulting in Total Service Revenue Requirements for water of
23 \$425,250 and for sewer of \$766,946. These calculations are summarized in
24 Surrebuttal Exhibit GCH-1, Schedule 12.

SURREBUTTAL TESTIMONY OF GERALD C. HARTMAN, P.E., BCEE, ASA

1 Q. Mr. Hartman, have you reviewed the ORS Computation of Revenue
2 Requirement for the Test Year Ended December 31, 2009, shown as
3 Surrebuttal Exhibit GCH-2?

4 A. Yes, I have reviewed the information prepared by ORS. Based on this
5 Exhibit, utilizing a 7.99% overall rate of return from Dr. Carlisle and
6 incorporating the audit adjustments from Ms. Stutz, the proposed revenue
7 increase shown on the Exhibit is \$130,753, which is solely an ORS witness
8 testimony.

9 Q. Does this conclude your Surrebuttal Testimony?

10 A. Yes.

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12 End of Testimony
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Schedule 1
Income Statement - Water
Test Year Ended December 31, 2008
Based on Overall Rate of Return of 8.36%

	Per Books	Proforma Adjustments	Proforma Present	Proposed Increase	Proforma Proposed	City of Tega Cay Proposed Adjustments				CAS-4 Reference
						Excess Wtr Loss	Inflation Adj.	Other	As Adjusted	
Operating Revenues						0.00%	2.57%			
Service Revenues	\$ 366,602	\$ (3,938)	\$ 362,664	\$ 79,390	\$ 442,054	\$ -	\$ -	\$ (14,482)	\$ 427,572	A
Miscellaneous Revenues	8,057	-	8,057	-	8,057	-	-	8,090	16,147	B
Uncollectible Accounts	(2,588)	(5,243)	(7,831)	(1,714)	(9,545)	-	-	7,137	(2,408)	C
Total Operating Revenues	\$ 372,071	\$ (9,181)	\$ 362,890	\$ 77,676	\$ 440,566	\$ -	\$ -	\$ 745	\$ 441,311	
Operating Expenses										
Salaries and Wages - Maintenance	\$ 98,295	\$ (20,494)	\$ 77,801	\$ -	\$ 77,801	\$ -	\$ -	\$ 11,981	\$ 89,782	D
Salaries and Wages - General	52,854	(11,775)	41,079	-	41,079	-	-	-	41,079	
Purchased Power	6,595	375	6,970	-	6,970	-	(179)	-	6,791	
Purchased Water/Sewer	(84,298)	80,152	(4,146)	-	(4,146)	-	-	-	(4,146)	
Maintenance and Repair	43,734	(6,771)	36,963	-	36,963	-	(948)	13,724	49,739	G
Maintenance Testing	22,413	(4,112)	18,301	-	18,301	-	-	(3,989)	14,312	H
Chemicals	11,735	668	12,403	-	12,403	-	(318)	-	12,085	
Transportation	19,085	(2,082)	17,003	-	17,003	-	(436)	-	16,567	
Operating Expenses Charged to Plant	(26,498)	(3,522)	(30,020)	-	(30,020)	-	-	2,882	(27,138)	K
Outside Services - Other	13,132	-	13,132	-	13,132	-	-	248	13,380	L
Office Supplies & Other Office Expenses	20,291	1,155	21,446	-	21,446	-	(550)	(1,795)	19,101	N
Regulatory Commission Expenses	27,478	15,502	42,980	-	42,980	-	-	-	42,980	
Pension and Other Benefits	31,570	2,418	33,988	-	33,988	-	-	(629)	33,359	P
Insurance	13,931	-	13,931	-	13,931	-	-	-	13,931	
Office Utilities	12,422	707	13,129	-	13,129	-	(337)	(1,005)	11,787	Q
Miscellaneous	9,160	-	9,160	-	9,160	-	-	(727)	8,433	R
Subtotal	\$ 271,899	\$ 52,221	\$ 324,120	\$ -	\$ 324,120	\$ -	\$ (2,768)	\$ 20,690	\$ 342,042	
Depreciation	81,853	(22,241)	59,612	-	59,612	-	-	-	59,612	
Taxes Other than Income	42,653	9,609	52,262	893	53,155	-	-	(13,342)	39,813	T
Deferred Income Tax - Fed	(6,569)	-	(6,569)	-	(6,569)	-	-	-	(6,569)	
Deferred Income Tax - State	(1,017)	-	(1,017)	-	(1,017)	-	-	-	(1,017)	
Income Taxes - Federal	2,746	(20,401)	(17,655)	24,801	7,146	-	-	(1,238)	5,908	
Income Taxes - State	(1,945)	(788)	(2,733)	3,839	1,106	-	-	(191)	915	
Amortization of CIAC	(42,933)	10,646	(32,287)	-	(32,287)	-	-	-	(32,287)	
Subtotal	\$ 74,788	\$ (23,175)	\$ 51,613	\$ 29,533	\$ 81,146	\$ -	\$ -	\$ (14,772)	\$ 66,374	
Total Operating Expenses	\$ 346,687	\$ 29,046	\$ 375,733	\$ 29,533	\$ 405,266	\$ -	\$ (2,768)	\$ 5,918	\$ 408,416	
Net Operating Income	\$ 25,384	\$ (38,227)	\$ (12,843)	\$ 48,143	\$ 35,300	\$ -	\$ 2,768	\$ (5,173)	\$ 32,895	
Interest During Construction	\$ (5,079)	\$ 5,079	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	W
Interest on Debt	28,852	(15,011)	13,841	-	13,841	-	-	-	13,841	
Net Income	\$ 1,611	\$ (28,295)	\$ (26,684)	\$ 48,143	\$ 21,459	\$ -	\$ 2,768	\$ (5,173)	\$ 19,054	

Note (1): Other Adjustment Column includes the net effect of adjustments made by ORS witness Stutz.

Schedule 2
Income Statement - Sewer
Test Year Ended December 31, 2008
Based on Overall Rate of Return of 8.36%

	Per Books	Proforma Adjustments	Proforma Present	Proposed Increase	Proforma Proposed	City of Tega Cay Proposed Adjustments				CAS-4 Reference
						I&I Adjust 23.00%	Inflation Adj. 2.57%	Other	As Adjusted	
Operating Revenues										
Service Revenues	\$ 736,879	\$ 2,984	\$ 739,863	\$ 159,612	\$ 899,475	\$ -	\$ -	\$ (117,304)	\$ 782,171	A
Miscellaneous Revenues	16,195	-	16,195	-	16,195	-	-	(4,670)	11,525	B
Uncollectible Accounts	(5,202)	(2,524)	(7,726)	(1,667)	(9,393)	-	-	6,309	(3,084)	C
Total Operating Revenues	\$ 747,872	\$ 460	\$ 748,332	\$ 157,945	\$ 906,277	\$ -	\$ -	\$ (115,665)	\$ 790,612	
Operating Expenses										
Salaries and Wages - Maintenance	\$ 96,980	\$ (20,220)	\$ 76,760	\$ -	\$ 76,760	\$ (17,655)	\$ -	\$ 11,823	\$ 70,928	D
Salaries and Wages - General	52,146	(11,618)	40,528	-	40,528	-	-	-	40,528	
Purchased Power	48,284	2,747	51,031	-	51,031	(11,436)	(1,309)	-	38,286	
Purchased Water/Sewer	-	-	-	-	-	-	-	-	-	
Maintenance and Repair	186,331	1,466	187,797	-	187,797	(42,085)	(4,818)	5,394	146,288	G
Maintenance Testing	14,967	(4,057)	10,910	-	10,910	(2,509)	-	(3,934)	4,467	H
Chemicals	11,578	659	12,237	-	12,237	(2,742)	(314)	-	9,181	
Transportation	18,830	(2,054)	16,776	-	16,776	-	(430)	-	16,346	
Operating Expenses Charged to Plant	(26,144)	(3,475)	(29,619)	-	(29,619)	-	-	2,848	(26,771)	K
Outside Services - Other	12,957	-	12,957	-	12,957	(2,980)	-	244	10,221	L
Office Supplies & Other Office Expenses	20,020	1,139	21,159	-	21,159	-	(543)	(1,771)	18,845	N
Regulatory Commission Expenses	27,110	15,294	42,404	-	42,404	-	-	-	42,404	
Pension and Other Benefits	31,148	2,386	33,534	-	33,534	-	-	(621)	32,913	P
Insurance	13,744	-	13,744	-	13,744	-	-	-	13,744	
Office Utilities	12,256	697	12,953	-	12,953	-	(332)	(991)	11,630	Q
Miscellaneous	9,038	-	9,038	-	9,038	(2,079)	-	(717)	6,242	R
Subtotal	\$ 529,245	\$ (17,036)	\$ 512,209	\$ -	\$ 512,209	\$ (81,486)	\$ (7,746)	\$ 12,275	\$ 435,252	
Depreciation	210,009	(68,540)	141,469	-	141,469	-	-	-	141,469	
Taxes Other than Income	48,048	9,480	57,528	1,796	59,324	-	-	(13,162)	46,162	T
Deferred Income Tax - Fed	(13,204)	-	(13,204)	-	(13,204)	-	-	-	(13,204)	
Deferred Income Tax - State	(2,043)	-	(2,043)	-	(2,043)	-	-	-	(2,043)	
Income Taxes - Federal	5,520	8,797	14,317	50,436	64,753	-	-	(8,252)	56,501	
Income Taxes - State	(3,910)	6,126	2,216	7,807	10,023	-	-	(1,277)	8,746	
Amortization of CIAC	(130,417)	32,474	(97,943)	-	(97,943)	-	-	-	(97,943)	
Subtotal	\$ 114,003	\$ (11,663)	\$ 102,340	\$ 60,039	\$ 162,379	\$ -	\$ -	\$ (22,690)	\$ 139,689	
Total Operating Expenses	\$ 643,248	\$ (28,699)	\$ 614,549	\$ 60,039	\$ 674,588	\$ (81,486)	\$ (7,746)	\$ (10,415)	\$ 574,941	
Net Operating Income	\$ 104,624	\$ 29,159	\$ 133,783	\$ 97,906	\$ 231,689	\$ 81,486	\$ 7,746	\$ (105,250)	\$ 215,671	
Interest During Construction	\$ (19,815)	\$ 19,815	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	W
Interest on Debt	113,906	(23,161)	90,745	-	90,745	-	-	-	90,745	
Net Income	\$ 10,533	\$ 32,505	\$ 43,038	\$ 97,906	\$ 140,944	\$ 81,486	\$ 7,746	\$ (105,250)	\$ 124,926	

Note (1): Other Adjustment Column includes the net effect of adjustments made by ORS witness Stutz.

Schedule 3
Income Statement - Combined
Based on Overall Rate of Return of 8.36%

	As Presented by TCWS			Proposed	Effect of
	Water	Sewer	Combined	Changes	Proposed Changes
Operating Revenues					
Service Revenues	\$ 442,054	\$ 899,475	\$ 1,341,529	\$ (131,786)	\$ 1,209,743
Miscellaneous Revenues	8,057	16,195	24,252	3,420	27,672
Uncollectible Accounts	(9,545)	(9,393)	(18,938)	13,446	(5,492)
Total Operating Revenues	\$ 440,566	\$ 906,277	\$ 1,346,843	\$ (114,920)	\$ 1,231,923
Operating Expenses					
Salaries and Wages - Maintenance	\$ 77,801	\$ 76,760	\$ 154,561	\$ 6,149	\$ 160,710
Salaries and Wages - General	41,079	40,528	81,607	-	81,607
Purchased Power	6,970	51,031	58,001	(12,924)	45,077
Purchased Water/Sewer	(4,146)	-	(4,146)	-	(4,146)
Maintenance and Repair	36,963	187,797	224,760	(28,733)	196,027
Maintenance Testing	18,301	10,910	29,211	(10,432)	18,779
Chemicals	12,403	12,237	24,640	(3,374)	21,266
Transportation	17,003	16,776	33,779	(866)	32,913
Operating Expenses Charged to Plant	(30,020)	(29,619)	(59,639)	5,730	(53,909)
Outside Services - Other	13,132	12,957	26,089	(2,488)	23,601
Office Supplies & Other Office Expenses	21,446	21,159	42,605	(4,659)	37,946
Regulatory Commission Expenses	42,980	42,404	85,384	-	85,384
Pension and Other Benefits	33,988	33,534	67,522	(1,250)	66,272
Insurance	13,931	13,744	27,675	-	27,675
Office Utilities	13,129	12,953	26,082	(2,665)	23,417
Miscellaneous	9,160	9,038	18,198	(3,523)	14,675
Subtotal	\$ 324,120	\$ 512,209	\$ 836,329	\$ (59,035)	\$ 777,294
Depreciation	59,612	141,469	201,081	-	201,081
Taxes Other than Income	53,155	59,324	112,479	(26,504)	85,975
Deferred Income Tax - Fed	(6,569)	(13,204)	(19,773)	-	(19,773)
Deferred Income Tax - State	(1,017)	(2,043)	(3,060)	-	(3,060)
Income Taxes - Federal	7,146	64,753	71,899	(9,490)	62,409
Income Taxes - State	1,106	10,023	11,129	(1,468)	9,661
Amortization of CIAC	(32,287)	(97,943)	(130,230)	-	(130,230)
Subtotal	\$ 81,146	\$ 162,379	\$ 243,525	\$ (37,462)	\$ 206,063
Total Operating Expenses	\$ 405,266	\$ 674,588	\$ 1,079,854	\$ (96,497)	\$ 983,357
Net Operating Income	\$ 35,300	\$ 231,689	\$ 266,989	\$ (18,423)	\$ 248,566
Interest During Construction	\$ -	\$ -	\$ -	\$ -	\$ -
Interest on Debt	13,841	90,745	104,586	-	104,586
Net Income	\$ 21,459	\$ 140,944	\$ 162,403	\$ (18,423)	\$ 143,980

Schedule 4
Balance Sheet
Based on Overall Rate of Return of 8.36%

	2008		
	Water	Wastewater	Combined
Assets			
Utility Plant			
Utility Plant in Service	\$ 2,653,429	\$ 9,819,202	\$ 12,472,631
Accumulated Depreciation	(740,755)	(2,861,197)	(3,601,952)
Subtotal	\$ 1,912,674	\$ 6,958,005	\$ 8,870,679
Plant Acquisition Adjustment	-	-	-
Construction Work in Progress	1,522	364,680	366,202
Net Utility Plant	\$ 1,914,196	\$ 7,322,685	\$ 9,236,881
Current and Accrued Assets			
Cash	\$ (78)		\$ (78)
Accounts Receivable (Net)	(739,886)		(739,886)
Other	162,691		162,691
Subtotal	\$ (577,273)		\$ (577,273)
Deferred Charges	\$ (183,509)		\$ (183,509)
Total Assets	\$ 1,153,414		\$ 8,476,099
Liabilities			
Equity Capital			
Common Stock & Pd in Capital	\$ 2,694,890		\$ 2,694,890
Retained Earnings	(975,751)		(975,751)
Net Equity Capital	\$ 1,719,139	\$ -	\$ 1,719,139
Current and Accrued Liabilities			
Accounts Payable	\$ 72,266		\$ 72,266
Accts Payable to Assoc. Co.	(310,782)		(310,782)
Customer Deposits	22,445		22,445
Accrued Taxes	1,289		1,289
Accrued Interest	28,782		28,782
Subtotal	\$ (186,000)	\$ -	\$ (186,000)
Deferred Revenues	\$ -		\$ -
Advances for Construction	-		-
Contrib. in Aid of Construc. (CIAC)	1,576,239	4,749,881	6,326,120
Deferred Income Taxes	616,840		616,840
Total Liabilities	\$ 3,726,218	\$ 4,749,881	\$ 8,476,099

Schedule 5
Rate Base and Rate of Return - Water
Based on Overall Rate of Return of 8.36%

	As Presented in Filing					City of Tega Cay Proposed Adjustments	Effect of Proposed Change
	Per Books	Proforma Adjustments	As Adjusted	Proposed Increase	Effect of Proposed Increase		
Rate Base							
Net Operating Income	\$ 25,384	\$ (38,227)	\$ (12,843)	\$ 48,143	\$ 35,300	\$ (2,405)	\$ 32,895
Gross Plant in Service	\$ 2,653,429	\$ 340,735	\$ 2,994,164	\$ -	\$ 2,994,164	\$ -	\$ 2,994,164
Accumulated Depreciation	(740,755)	44,427	(696,328)	-	(696,328)	-	(696,328)
Net Plant in Service	\$ 1,912,674	\$ 385,162	\$ 2,297,836	\$ -	\$ 2,297,836	\$ -	\$ 2,297,836
Cash Working Capital	\$ 39,319	\$ 7,729	\$ 47,048	\$ -	\$ 47,048	\$ -	\$ 47,048
Contrib. in Aid of Construc. (CIAC)	(1,576,239)	(10,646)	(1,586,885)	-	(1,586,885)	-	(1,586,885)
Advances for Construction	-	-	-	-	-	-	-
Deferred Income Taxes	(338,729)	-	(338,729)	-	(338,729)	-	(338,729)
Customer Deposits	(25,786)	-	(25,786)	-	(25,786)	-	(25,786)
					-		
Total Rate Base	\$ 11,239	\$ 382,245	\$ 393,484	\$ -	\$ 393,484	\$ -	\$ 393,484
Return on Rate Base	225.86%		-3.26%		8.97%		8.36%

Schedule 6
Rate Base and Rate of Return - Sewer
Based on Overall Rate of Return of 8.36%

	As Presented in Filing					City of Tega Cay Proposed Adjustments	Effect of Proposed Change
	Per Books	Proforma Adjustments	As Adjusted	Proposed Increase	Effect of Proposed Increase		
Rate Base							
Net Operating Income	\$ 104,624	\$ 29,159	\$ 133,783	\$ 97,906	\$ 231,689	\$ (16,018)	\$ 215,671
Gross Plant in Service	\$ 9,819,202	\$ 298,470	\$ 10,117,672	\$ -	\$ 10,117,672	\$ -	\$ 10,117,672
Accumulated Depreciation	(2,861,197)	338,008	(2,523,189)	-	(2,523,189)	-	(2,523,189)
Net Plant in Service	\$ 6,958,005	\$ 636,478	\$ 7,594,483	\$ -	\$ 7,594,483	\$ -	\$ 7,594,483
Cash Working Capital	\$ 72,161	\$ (944)	\$ 71,217	\$ -	\$ 71,217	\$ -	\$ 71,217
Contrib. in Aid of Construc. (CIAC)	(4,749,881)	(32,474)	(4,782,355)	-	(4,782,355)	-	(4,782,355)
Advances for Construction	-	-	-	-	-	-	-
Deferred Income Taxes	(278,111)	-	(278,111)	-	(278,111)	-	(278,111)
Customer Deposits	(25,441)	-	(25,441)	-	(25,441)	-	(25,441)
					-		
Total Rate Base	\$ 1,976,733	\$ 603,060	\$ 2,579,793	\$ -	\$ 2,579,793	\$ -	\$ 2,579,793
Return on Rate Base	5.29%		5.19%		8.98%		8.36%

Schedule 7
Rate Base and Rate of Return - Combined
Based on Overall Rate of Return of 8.36%

	As Presented by TCWS			Proposed Changes	Effect of Proposed Changes
	Water	Sewer	Combined		
Rate Base					
Net Operating Income	\$ 35,300	\$ 231,689	\$ 266,989	\$ (18,423)	\$ 248,566
Gross Plant in Service	\$ 2,994,164	\$ 10,117,672	\$ 13,111,836	\$ -	\$ 13,111,836
Accumulated Depreciation	(696,328)	(2,523,189)	(3,219,517)	-	(3,219,517)
Net Plant in Service	\$ 2,297,836	\$ 7,594,483	\$ 9,892,319	\$ -	\$ 9,892,319
Cash Working Capital	\$ 47,048	\$ 71,217	\$ 118,265	\$ -	\$ 118,265
Contrib. in Aid of Construc. (CIAC)	(1,586,885)	(4,782,355)	(6,369,240)	-	(6,369,240)
Advances for Construction	-	-	-	-	-
Deferred Income Taxes	(338,729)	(278,111)	(616,840)	-	(616,840)
Customer Deposits	(25,786)	(25,441)	(51,227)	-	(51,227)
Total Rate Base	\$ 393,484	\$ 2,579,793	\$ 2,973,277	\$ -	\$ 2,973,277
Return on Rate Base	8.97%	8.98%	8.98%		8.36%

Schedule 8
Proposed Revenues - Water
Based on Overall Rate of Return of 8.36%

<u>Bill Code</u>	<u>Description</u>	<u>Usage Charge</u>	<u>BFC</u>	<u>Gallonage</u>	<u>Units</u>	<u>Jan - Dec Revenues</u>
AS PROPOSED IN TCWS FILING (Per TCWS Filing, Schedule E)						
<u>All Subs</u>						
48501	5/8" Residential Water	\$ 2.06	\$ 9.21	108,758,466	21,911	\$ 425,948
48502	5/8" Commercial Water	\$ 2.06	\$ 9.21	574,460	191	2,943
48505	1" Commercial Water	\$ 2.06	\$ 9.21	273,520	88	1,374
48506	2" Commercial Water	\$ 2.06	\$ 9.21	794,000	11	1,737
48540	Hydrant Rental	\$ -	\$ 10.15		990	10,051
				110,400,446	23,191	\$ 442,054

BASED ON CITY OF TEGA CAY RECOMMENDED ADJUSTMENTS

<u>All Subs</u>						
48501	5/8" Residential Water	\$ 1.99	\$ 8.91	108,758,466	21,911	\$ 411,994
48502	5/8" Commercial Water	\$ 1.99	\$ 8.91	574,460	191	2,847
48505	1" Commercial Water	\$ 1.99	\$ 8.91	273,520	88	1,329
48506	2" Commercial Water	\$ 1.99	\$ 8.91	794,000	11	1,680
48540	Hydrant Rental	\$ -	\$ 9.82		990	9,722
				110,400,446	23,191	\$ 427,572

Schedule 9
Proposed Revenues - Sewer
Based on Overall Rate of Return of 8.36%

<u>Bill Code</u>	<u>Description</u>	<u>Usage Charge</u>	<u>Rate</u>	<u>Gallons</u>	<u>Units</u>	<u>Jan - Dec Revenues</u>
AS PROPOSED IN TCWS FILING						
<u>All Subs</u>						
48521	5/8" Residential Sewer	\$ -	\$ 40.12	-	21,899	\$ 878,690
48522	5/8" Commercial Sewer	\$ -	\$ 40.12	-	90	3,611
48523	1" Commercial Sewer	\$ -	\$ 40.12	-	26	1,043
48524	2" Commercial Sewer	\$ -	\$ 40.12	-	402	16,130
				-	22,417	\$ 899,475

BASED ON CITY OF TEGA CAY RECOMMENDED ADJUSTMENTS

<u>All Subs</u>						
48521	5/8" Residential Sewer	\$ -	\$ 34.89	-	21,899	\$ 764,097
48522	5/8" Commercial Sewer	\$ -	\$ 34.89	-	90	3,140
48523	1" Commercial Sewer	\$ -	\$ 34.89	-	26	907
48524	2" Commercial Sewer	\$ -	\$ 34.89	-	402	14,027
				-	22,417	\$ 782,171

Schedule 10
Average Bill
Present and Proposed Rates
(Based on City of Tega Cay Recommended Adjustments)
Based on Overall Rate of Return of 8.36%

Bill Code	Description	Current Rate		Average		Increase		Date of Last Rate Increase	
		Usage	Base	Usage	Bill	Amount	Percent		
WATER - CURRENT									
All Subs									
48501	5/8" Residential Water	\$	1.69	\$	7.56	4,504.97	\$	15.17	10/17/2006
48502	5/8" Commercial Water	\$	1.69	\$	7.56	2,736.56	\$	12.18	10/17/2006
48505	1" Commercial Water	\$	1.69	\$	7.56	1,340.71	\$	9.83	10/17/2006
48506	2" Commercial Water	\$	1.69	\$	7.56	86,200.00	\$	153.24	10/17/2006
48540	Hydrant Rental	\$	-	\$	8.33	-	\$	8.33	10/17/2006

WATER - PROPOSED BASED ON CITY OF TEGA CAY RECOMMENDED ADJUSTMENTS

All Subs									
48501	5/8" Residential Water	\$ 1.99	\$ 8.91	4,504.97	\$ 17.89	\$ 2.72	17.90%		
48502	5/8" Commercial Water	\$ 1.99	\$ 8.91	2,736.56	\$ 14.36	\$ 2.18	17.89%		
48505	1" Commercial Water	\$ 1.99	\$ 8.91	1,340.71	\$ 11.58	\$ 1.76	17.88%		
48506	2" Commercial Water	\$ 1.99	\$ 8.91	86,200.00	\$ 180.71	\$ 27.47	17.93%		
48540	Hydrant Rental	\$ -	\$ 9.82	-	\$ 9.82	\$ 1.49	17.89%		

SEWER - CURRENT

All Subs									
48521	5/8" Residential Sewer	\$ -	\$ 33.02	4,504.97	\$ 33.02				10/17/2006
48522	5/8" Commercial Sewer	\$ -	\$ 33.02	2,736.56	\$ 33.02				10/17/2006
48523	1" Commercial Sewer	\$ -	\$ 33.02	1,340.71	\$ 33.02				10/17/2006
48524	2" Commercial Sewer	\$ -	\$ 33.02	86,200.00	\$ 33.02				10/17/2006

SEWER - PROPOSED BASED ON CITY OF TEGA CAY RECOMMENDED ADJUSTMENTS

All Subs									
48521	5/8" Residential Sewer	\$ -	\$ 34.89	4,504.97	\$ 34.89	\$ 1.87	5.67%		
48522	5/8" Commercial Sewer	\$ -	\$ 34.89	2,736.56	\$ 34.89	\$ 1.87	5.67%		
48523	1" Commercial Sewer	\$ -	\$ 34.89	1,340.71	\$ 34.89	\$ 1.87	5.67%		
48524	2" Commercial Sewer	\$ -	\$ 34.89	86,200.00	\$ 34.89	\$ 1.87	5.67%		

Schedule 11
Summary Adjustments
TCWS Filing vs. City of Tega Cay
Based on Overall Rate of Return of 8.36%

SERVICE REVENUE

Description	Proposed Increase			Proforma Proposed		
	Water	Wastewater	Total	Water	Wastewater	Total
TCWS	\$ 79,390	\$ 159,612	\$ 239,002	\$ 442,054	\$ 899,475	\$ 1,341,529
City of Tega Cay	64,908	42,308	107,216	427,572	782,171	1,209,743
Difference - Amount	\$ (14,482)	\$ (117,304)	\$ (131,786)	\$ (14,482)	\$ (117,304)	\$ (131,786)
Difference - Percent	-18.24%	-73.49%	-55.14%	-3.28%	-13.04%	-9.82%

RETURN ON RATE BASE

Description	Percentage		Dollar Amount		
	Water	Wastewater	Water	Wastewater	Total
TCWS	8.97%	8.98%	\$ 35,300	\$ 231,689	\$ 266,989
City of Tega Cay	8.36%	8.36%	32,895	215,671	248,566
Difference	-0.61%	-0.62%	\$ (2,405)	\$ (16,018)	\$ (18,423)

AVERAGE RESIDENTIAL BILL (5/8" Meter)

Description	Average Bill Amount			Percentage Increase		
	Water	Wastewater	Total	Water	Wastewater	Total
TCWS	\$ 18.49	\$ 40.12	\$ 58.61	21.90%	21.50%	21.62%
City of Tega Cay	17.89	34.89	52.78	17.90%	5.67%	9.53%
Difference	\$ (0.60)	\$ (5.23)	\$ (5.83)	-4.00%	-15.83%	-12.10%

Schedule 12
Summary Adjustments
TCWS Filing vs. City of Tega Cay
Based on Dr. Carlisle Overall Rate of Return of 7.99%

SERVICE REVENUE						
Description	Proposed Increase			Proforma Proposed		
	Water	Wastewater	Total	Water	Wastewater	Total
TCWS	\$ 79,390	\$ 159,612	\$ 239,002	\$ 442,054	\$ 899,475	\$ 1,341,529
City of Tega Cay	62,586	27,083	89,669	425,250	766,946	1,192,196
Difference - Amount	\$ (16,804)	\$ (132,529)	\$ (149,333)	\$ (16,804)	\$ (132,529)	\$ (149,333)
Difference - Percent	-21.17%	-83.03%	-62.48%	-3.80%	-14.73%	-11.13%

RETURN ON RATE BASE					
Description	Percentage		Dollar Amount		
	Water	Wastewater	Water	Wastewater	Total
TCWS	8.97%	8.98%	\$ 35,300	\$ 231,689	\$ 266,989
City of Tega Cay	7.99%	7.99%	31,439	206,125	237,564
Difference	-0.98%	-0.99%	\$ (3,861)	\$ (25,564)	\$ (29,425)

AVERAGE RESIDENTIAL BILL (5/8" Meter)						
Description	Average Bill Amount			Percentage Increase		
	Water	Wastewater	Total	Water	Wastewater	Total
TCWS	\$ 18.49	\$ 40.12	\$ 58.61	21.90%	21.50%	21.62%
City of Tega Cay	17.79	34.21	52.00	17.26%	3.61%	7.92%
Difference	\$ (0.70)	\$ (5.91)	\$ (6.61)	-4.64%	-17.89%	-13.71%



LEGAL DEPARTMENT FAX TRANSMITTAL SHEET

Florence P. Belser, General Counsel
 Nanette S. Edwards, Chief Counsel & Dir. Of Legal Services
 C. Lessie Hammonds
 Shannon Bowyer Hudson
 Jeffery M. Nelson
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FACSIMILE TRANSMITTAL SHEET

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☐ URGENT ☒ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS:

Please see attached & call if you have any questions.

Taga Cay Water Service, Inc.
 Computation of Revenue Requirement
 Test Year Ended December 31, 2009

Line No.	Description	Requested	Weighted Cost of Debt			
			Description	Capital Structure	Ratio	Debt Cost Overall Cost
	(Col. 1)	(Col. 2)				
1	Jurisdictional Rate Base	2,979,491	Long-Term Debt	180,000,000	53.30%	6.60%
2	Required Rate of Return	7.99%				3.52%
3	Required Return	238,061	Common Equity	157,737,014	46.70%	9.57%
4	Actual Return Earned	158,095	Totals	337,737,014	100.00%	7.99%
5	Required Increase to Return	79,966				
6	Factor to Remove Customer Growth					
7	Additional Return Required from Revenue Increase	79,966				
8	Composite Tax Factor	0.81158				
9	Required Revenue Increase	130,753				
<u>Verification of Proposed Increase</u>						
10	Proposed Revenue Increase	130,753				
<u>Additional Expenses</u>						
11	Gross Receipts & PSC Support Tax @ .0095919	1,254				
12	State Income Tax @ 5%	8,475				
13	Federal Income Tax @ 35%	43,058				
14	Total Taxes	50,787				
15	Additional Return	79,966				
16	Additional Customer Growth					
17	Total Additional Return	79,966				
18	Earned Return	158,095				
19	Total Return as Adjusted	238,061				
20	Rate Base	2,979,491				
21	Rate of Return	7.99%				

130,753